

CLAIMS

1. A process for preparing or selecting a composition yielding a maximum fragrance burst of one or more of the fragrance components of at least 20% and for providing enhanced deposition of one or more fragrance components onto surfaces on which said composition comes into contact, relative to an undiluted product, wherein said composition is defined by perfume burst index PBI:

$$\text{PBI} = \frac{\phi - 1.4/\text{CMC}}{K}$$

wherein ϕ = oil/water partition coefficient of a selected perfume or perfume components in a mixture;

CMC = critical micellization concentration (wt./wt.) of selected surfactant systems or mixture of surfactant systems in diluent or continuous phase;

K = volatility constant of selected perfume from said continuous phase or diluent (atmospheres);

wherein said process comprises selecting a perfume or at least one component of said perfume mixture and selecting said surfactant system or said mixture of surfactants such that the above noted variables are calculated to provide a PBI that is greater than about 3.

2. A process according to claim 1, wherein said perfume is a type 2 perfume selected to have an oil/water partition coefficient greater than about 500 and volatility constant of less than about 20.

3. A process according to claim 2, wherein said perfume is selected from the group consisting of allyl cyclohexane propionate, ambrettolide, Ambrox DL (dodecahydro-3a,6,6,9a-tetramethyl-naphtho[2,1-b]furan), amyl benzoate, amyl cinnamate, amyl cinnamic aldehyde, amyl salicylate, anethol, aurantol, benzophenone, benzyl butyrate, benzyl iso-valerate, benzyl salicylate, cadinene, campylcyclohexal, cedrol, cedryl acetate, cinnamyl cinnamate, citronellyl acetate, citronellyl isobutyrate, citronellyl propionate, cuminic aldehyde, cyclohexylsalicylate, cyclamen aldehyde, cyclomyral, dihydro isojaconate, diphenyl methane, diphenyl oxide, dodecanal, dodecalactone, ethylene brassylate, ethylmethyl phenylglycidate, ethyl undecylenate, exaltolide, Galoxilide™ (1,3,4,6,7,8-hexhydro,4,6,6,7,8,8-hexamethyl-cyclopenta- γ -2-benzopyran), geranyl acetate, geranyl isobutyrate, hexadecanolide, hexenyl salicylate, hexyl cinnamic aldehyde, hexyl salicylate, α -ionone, β -ionone, γ -ionone, α -irone, isobutyl benzoate, isobutyl quinoline, Iso E Super™ (7-acetyl,1,2,3,4,5,6,7,8-octahydro,1,1,6,7-tetramethyl naphthalene), cis-jasmone, linal, linalyl benzoate, 20 methoxy naphthalene, methyl cinnamate, methyl eugenol, γ -methylionone, methyl linolate, methyl linolenate, musk indanone, musk ketone, musk tibetine, myristicin, neryl acetate, δ -nonalactone, γ -nonalactone, patchouli alcohol, phantolide, phenylethyl benzoate, phenylethylphenylacetate, phenyl heptanol, phenyl hexanol, α -santalol, thibetolide, tonalid, δ -undecalactone, γ -undecalactone, vertenex, vetiveryl acetate, yara-yara, ylangene and mixtures thereof.
4. A process according to claim 1, wherein said perfume is a type 3 perfume having an oil/water partition coefficient of greater than about 500 and a volatility constant of about 20 to about 1000.

5. A process according to claim 4, wherein said perfume is selected from the group consisting of allo-ocimene, allyl caproate, allyl heptoate, anisole, camphene, carvacrol, carvone, citral, citronellal, citronellol, citronellyl nitrile, coumarin, cyclohexyl ethylacetate, p-cymene, decanal, dihydromyrcenol, dihydromyrcenyl acetate, dimethyl octanol, ethyllinalool, ethylhexyl ketone, eucalyptol, fenchyl acetate, geraniol, gernyl formate, hexenyl isobutyrate, hexyl acetate, hexyl neopentanoate, heptanal, isobornyl acetate, isoeugenol, isomenthone, isononyl acetate, isononyl alcohol, isomenthol, isopulegol, limonene, linalool, linalyl acetate, menthyl acetate, methyl chavicol, methyl octyl acetaldehyde, myrcene, naphthalene, nerol, neral, nonanal, 2-nonanone, nonyl acetate, octanol, octanal, α -pinene, β -pinene, rose oxide, α -terpinene, γ -terpinene, α -terpinenol, terpinolene, terpinyl acetate, tetrahydrolinalool, tetrahydromyrcenol, undecenal, veratrol, verdox, and mixtures thereof.
6. A process for preparing a composition according to claim 1 yielding a maximum fragrance burst of at least 25%.
7. A method for changing a fragrance note in a composition subsequent to dilution by (1) selecting a fragrance with mixture perfume components wherein one or more of said perfume components have a PBI of greater than 3 and one or more components have a PBI of less than 3; and (2) assuring the selection of fragrance components such that the components desired in a new fragrance have a PBI greater than 3.

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8. A method for introducing a fragrance to a composition subsequent to dilution by ensuring desired fragrance or fragrance components have a PBI of greater than about 3 so that, upon dilution, the concentration of desired fragrance components in a vapor phase exceeds an odor threshold of the desired components.
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9. A process according to claim 1, wherein said surfactant system and/or surfactant system mixtures are selected to have a CMC greater than about .0001 wt. to wt.
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10. A process according to claim 9, wherein the surfactant systems contain surfactants selected from the group consisting of sodium lauryl ether sulfate, sodium laurate, potassium laurate, sodium oleate, potassium oleate, triethanolamine laurate, alkylpolyglucosides, sodium lauryl sulfate, caprylamidopropyl betaine, sodium cocoylisethionate and mixtures thereof.
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11. A process according to claim 9, wherein said surfactant systems or surfactant system mixtures includes CMC modifying ingredients selected from the group consisting of urea; glycerine; C₁-C₁₂ straight-chained or branched alcohols or diols; water soluble polymers selected from polyvinylpyrrolidone, polyvinylalcohol, polyethyleneglycol, polypropyleneglycol and mixtures thereof; multivalent electrolytes selected from magnesium, calcium, aluminum salts and mixtures thereof; and sugars selected from dextrose, glucose, maltose, galactose; sucrose and mixtures thereof.
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